

**TITLE: METHOD OF ASSEMBLING AN APPLIANCE WITH INTERCHANGEABLE CONSOLES**

**BACKGROUND OF THE INVENTION**

5 Appliances, such as washers and dryers, conventionally consist of a base unit housing the various electrical components for performing the functions of the appliance, and a control console housing the controls necessary to control operation of the components in the base unit. For example, the washer base unit includes a cabinet housing a motor, a rotatable tub, pumps, an agitator or washing mechanism, and other devices  
10 needed to get the clothes wet, washed with or without detergent, rinsed, and then spun to extract moisture. Similarly, a base unit for a dryer contains the blower, motor, heating devices, thermostats, and a rotating drum for containing the clothes.

Each different model of a particular line of appliances typically requires the manufacturer to assemble a complete appliance, with both the base unit and the console.

15 The appliance dealer or retail establishment thus must have an inventory of different models. Maintaining an inventory of all the models is costly due to the models themselves and the storage space required. If a customer desires a model which is not available at the dealer's site, the entire appliance must be shipped from the manufacturer to the dealer for delivery to the customer. Shipping of unavailable models delays delivery to the customer,  
20 and may add to the cost if shipping is expedited.

Therefore, it is desirable to reduce the inventory needs of a dealer or retail establishment, and minimize shipping costs and time.

Accordingly, a primary objective of the present invention is the provision of appliances having a standard base unit and interchangeable control consoles.

25 Another objective of the present invention is the provision of a method of assembling appliances wherein different models are created using identical base units and different control consoles.

A further objective of the present invention is the provision of a method of assembling an appliance wherein a purchaser selects the control console to be mounted on  
30 a standardized base unit to provide an appliance with desired functional features for the purchaser.

Another objective of the present invention is the provision of an appliance which can be upgraded by changing the control console on the base unit of the appliance.

These and other objectives become apparent from the following description of the invention.

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## **SUMMARY OF THE INVENTION**

An appliance, such as a clothes washer or dryer, dishwasher or range, is provided with a standardized base unit having the same operative components as other similar appliances. A control console for the base unit is selected from a group of consoles each  
10 having different control features, such that each different control console creates a different model appliance with different functional features.

The method of assembling an appliance includes the step of providing a base unit, allowing a purchaser to select a control console from a plurality of control consoles each having different control features for operating components in the base unit, and then  
15 mounting the selected control console onto the base unit to create the assembled appliance. The appliance can be upgraded by removing the selected control console and mounting a second selected control console having additional control features. The console is mounted downstream of the manufacturing facility, later in the distribution process. It may be mounted at a regional warehouse, retail establishment or by an appliance dealer. Thus, a  
20 plurality of different appliance models can be created with a single standardized base unit with interchangeable control units.

## **BRIEF DESCRIPTION OF THE DRAWINGS**

Figure 1 is a perspective view of an assembled appliance according to the present  
25 invention.

Figure 2 is a perspective schematic showing a standardized base unit with different control consoles which can be selectively mounted on the base unit to create different appliance models, according to the present invention.

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## DETAILED DESCRIPTION OF THE DRAWINGS

An appliance, such as a clothes washer or dryer, dishwasher or range, is designated in the drawings by the reference numeral 10. The appliance includes base unit 12 and a control console 14.

5           The base unit 12 includes a cabinet with a top cover 16 and a door 18 which house the various components which perform the washing or drying function of the appliance. The appliance 10 may be a top loading appliance, with the door 18 on the top cover 16, as shown in Figure 1, or may be a front loading appliance with the door 18 mounted on the front panel (not shown). During the manufacturing process, every washer or dryer will  
10          have a standardized identical base unit 12 with the same internal functional components.

The control console 14 includes various buttons 20 and dials 22 for controlling the operation of the components in the base unit 12. The buttons 20 and dials 22 may be electro-mechanical or electronic. Lights 24 may also be provided on the console 14 to indicate particular cycles or functions of the appliance 10.

15           In the manufacturing stage, different consoles 14A, 14B, and 14C are made, each having different control features. For example, console 14A is for a low end model with minimal features, console 14B is for an average model, and console 14C is for a high end model with many features. It is understood that the manufacturer may have as many different consoles 14 as desired. The three consoles 14A, B, C shown in Figure 2 are  
20          merely representative of the options available. While the various consoles 14A, B, C can be assembled onto the standardized base units 12 at the manufacturing plant, the assembly can also be delayed until a purchase is made by a consumer. In such case, the base units 12 and consoles 14A, B, C are shipped separate from one another to a regional warehouse, a dealer or retail establishment.

25           A consumer can then select the console 14A, 14B or 14C, depending upon the desired functions. The selected console 14A, B, C is then installed on the base unit 12. Installation may be performed by the manufacturer at the warehouse. Alternatively, it could be installed at a retail establishment or by a dealer's representative in the consumer's home. If the customer later wishes to upgrade the appliance 10, the originally selected  
30          console 14A, B, C is removed and a different console 14 with additional features can be installed.

In the above-described example, it should be understood that the fully assembled appliance 10 created by assembling console 14A or 14B may contain components within base unit 12 that are not utilized. In other words, some electrical components of base unit 12 may not be electrically connected to the control console 14A or 14B. In practice, the increased average cost of base unit 12 must be offset by savings in inventory carrying cost, increased sales due to improved product availability and improved dealer relations.

Thus, each console 14A, B, C creates a different model appliance 10. The differentiation between models based strictly upon the selected consoles allows customers to select from a wider variety of appliance models. At the same time, the dealer or retail establishment or regional warehouse can stock less base units in inventory, and keep sufficient quantities of the various consoles 14A, B, C to assemble the various appliance models. Alternatively, the dealer or retailer can utilize express or overnight delivery of consoles 14, rather than delivery of a complete, assembled appliance 10. Therefore, the dealer or retailer does not have to stock every model of the appliance 10. Furthermore, service of inoperable appliances 10 is simplified, since the technician can quickly diagnose the problem as being in either the base unit 12 or the console 14.

While the invention has been described with respect to a clothes washer or dryer, it should be understood that it could be applied, but not limited, to additional usage with ranges and dishwashers.

The invention has been shown and described above with the preferred embodiments, and it is understood that many modifications, substitutions, and additions may be made which are within the intended spirit and scope of the invention. From the foregoing, it can be seen that the present invention accomplishes at least all of its stated objectives.